

**Amendments to and listing of the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-15. (Canceled)

16. (Currently Amended) A computer-implemented method of creating a virtual traffic network representing traffic conditions on a road system, the method comprising:

(a) inputting into a processor map data representing a road system, the road system being defined by a plurality of links;

(b) inputting into the processor flow data related to traffic flow on the road system;

(c) inputting into the processor ~~traffic~~ information about traffic events, ~~which are correlated to~~ including information that correlates the traffic events to one or more of the links on the road system, wherein the traffic events are occurrences on the road system which may have an impact on the flow of traffic, and the traffic event information is inputted into the processor separately from the flow data related to the traffic flow; and

(d) the processor integrating the map data, the flow data and the traffic event information to produce a virtual traffic network representing traffic conditions on the road system, wherein the virtual traffic network indicates both the flow data and the traffic event information.

17. (Original) The method of claim 16 wherein the flow data is real-time flow data, the virtual traffic network representing real-time traffic conditions on the road system.

18. (Original) The method of claim 16 wherein the flow data is input from a plurality of road sensors.

19. (Original) The method of claim 16 wherein step (a) further comprises customizing the map data to define locally known features of the road system.

20. (Currently Amended) The method of claim 16 wherein one of the traffic events are incidents and the traffic information includes information related to ~~one or more~~ incidents on the road

system.

21. (Currently Amended) The method of claim 16 wherein the map data, the flow data and the traffic information have a synaptic relationship with each other.

22. (Original) The method of claim 16 wherein the virtual traffic network is spatially oriented.

23-80. (Canceled)

81. (Currently Amended) An article of manufacture for creating a virtual traffic network representing traffic conditions on a road system, the article of manufacture comprising a computer-readable medium holding encoded with computer-executable instructions for performing a method comprising:

(a) inputting into a processor map data representing a road system, the road system being defined by a plurality of links;

(b) inputting into the processor flow data related to traffic flow on the road system;

(c) inputting into the processor ~~traffic~~ information about traffic events, ~~which are correlated to~~ including information that correlates the traffic events to one or more of the links on the road system, wherein the traffic events are occurrences on the road system which may have an impact on the flow of traffic, and the traffic event information is inputted into the processor separately from the flow data related to the traffic flow; and

(d) the processor integrating the map data, the flow data and the traffic event information to produce a virtual traffic network representing traffic conditions on the road system, wherein the virtual traffic network indicates both the flow data and the traffic event information.

82. (Previously Presented) The article of manufacture of claim 81 wherein the flow data is real-time flow data, the virtual traffic network representing real-time traffic conditions on the road system.

83. (Previously Presented) The article of manufacture of claim 81 wherein the flow data is input

from a plurality of road sensors.

84. (Previously Presented) The article of manufacture of claim 81 wherein step (a) further comprises customizing the map data to define locally known features of the road system.

85. (Currently Amended) The article of manufacture of claim 81 wherein one of the traffic events are incidents and the traffic information includes information related to ~~one or more~~ incidents on the road system.

86. (Currently Amended) The article of manufacture of claim 81 wherein the map data, the flow data and the ~~traffic~~ information have a synaptic relationship with each other.

87. (Previously Presented) The article of manufacture of claim 81 wherein the virtual traffic network is spatially oriented.

88. (Currently Amended) A computer-implemented apparatus for creating a virtual traffic network representing traffic conditions on a road system, the apparatus comprising:

(a) means for inputting into a processor map data representing a road system, the road system being defined by a plurality of links;

(b) means for inputting into the processor flow data related to traffic flow on the road system;

(c) means for inputting into the processor ~~traffic~~ information about traffic events, ~~which are correlated to including information that correlates the traffic events to~~ one or more of the links on the road system, wherein the traffic events are occurrences on the road system which may have an impact on the flow of traffic, and the traffic event information is inputted into the processor separately from the flow data related to the traffic flow; and

(d) means for integrating the map data, the flow data and the traffic event information to produce a virtual traffic network representing traffic conditions on the road system, wherein the virtual traffic network indicates both the flow data and the traffic event information.

89. (Previously Presented) The apparatus of claim 88 wherein the flow data is real-time flow

data, the virtual traffic network representing real-time traffic conditions on the road system.

90. (Previously Presented) The apparatus of claim 88 wherein the flow data is input from a plurality of road sensors.

91. (Previously Presented) The apparatus of claim 88 wherein the means for inputting into a processor map data representing a road system further comprises means for customizing the map data to define locally known features of the road system.

92. (Currently Amended) The apparatus of claim 88 wherein one of the traffic events are incidents and the traffic information includes information related to ~~one or more~~ incidents on the road system.

93. (Currently Amended) The apparatus of claim 88 wherein the map data, the flow data and the ~~traffic~~ information have a synaptic relationship with each other.

94. (Previously Presented) The apparatus of claim 88 wherein the virtual traffic network is spatially oriented.

95. (New) The method of claim 16 wherein each link represents a distinct stretch of the road system between two nodes, each node being a decision point on the road system.

96. (New) The method of claim 16 wherein each link represents a distinct stretch of the road system between two nodes, each node being where two or more roadways merge together.

97. (New) The method of claim 16 wherein step (c) is performed by a human operator.

98. (New) The method of claim 16 further comprising:

(e) graphically displaying the virtual traffic network, including the map data, the flow data and the traffic event information.

99. (New) The article of manufacture of claim 81 wherein each link represents a distinct stretch of the road system between two nodes, each node being a decision point on the road system.

100. (New) The article of manufacture of claim 81 wherein each link represents a distinct stretch of the road system between two nodes, each node being where two or more roadways merge together.

101. (New) The article of manufacture of claim 81 wherein step (c) is performed by a human operator inputting the traffic event information into a user interface display screen.

102. (New) The article of manufacture of claim 81 wherein the computer-readable medium is encoded with computer-executable instructions for performing a method further comprising:  
(e) graphically displaying the virtual traffic network, including the map data, the flow data and the traffic event information.

103. (New) The apparatus of claim 88 wherein each link represents a distinct stretch of the road system between two nodes, each node being a decision point on the road system.

104. (New) The apparatus of claim 88 wherein each link represents a distinct stretch of the road system between two nodes, each node being where two or more roadways merge together.

105. (New) The apparatus of claim 88 wherein the means for inputting is a user interface display screen that receives the traffic event information from a human operator.

106. (New) The apparatus of claim 88 further comprising:  
(e) means for graphically displaying the virtual traffic network, including the map data, the flow data and the traffic event information.